

Docket No.: 2080.1068

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Andreas FREY et al.

Serial No. 10/552,149

Group Art Unit: 2617

Confirmation No. 9167

Filed: October 7, 2005

Examiner: CHAKOUR, Issam

For: METHOD FOR TRANSMITTING DATA IN A RADIO COMMUNICATION SYSTEM

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir:

This is in response to the final Office Action mailed June 22, 2011, and having a period for response set to expire on September 22, 2011.

Applicants request review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a Notice of Appeal and the requisite fee.

If there are any additional fees associated with filing of this Request, please charge the same to our Deposit Account No. 19-3935.

REMARKS

Claims 12, 15-27, and 29-33 are pending and under consideration.

A pre-appeal brief panel review of the identified appealable issue I discussed below is requested.

1. The cited prior art references, alone or in combination, do not teach or make obvious all of the recited features of the claims

Claims 12, 29, and 32 are rejected as allegedly being rendered obvious by U.S. Patent Application Publication No. 2003/0161343 to Ghosh (hereinafter "Ghosh") in view of U.S. Patent No. 5,889,770 to Jokiaho et al. (hereinafter "Jokiaho") and U.S. Patent Application Publication No. 2009/0093243 to Lee et al. (hereinafter "Lee").

Claims 15, 23-27, 29-31, and 33 are rejected as allegedly being rendered obvious by Ghosh, Jokiaho, and Lee and further in view of U.S. Patent Application Publication No. 2005/0239460 to Kroth et al. (hereinafter "Kroth")

This rejection is respectfully traversed.

The independent claims recite that the subscriber stations take the measurements of the common channel and transmit these measurements to the base station so that the measurements are made available to the base station. Thus, based on measurements taken in the subscriber stations and made available to the Node B (base station) as to which particular subscriber station(s) have a bad quality of transmission, the CRNC can determine the measures to be taken to improve the quality of transmission. The independent claims further provide for transmitting, from the base station, a first message to a controlling radio network controller allocated to the base station when the measurements show that the transmission quality does not meet a first defined criterion, the first message containing information about the transmission quality and an identifier of at least one particular subscriber station for which the measurements indicated that the transmission quality meets a second criterion.

None of the cited prior art references teach or suggest these features.

Ghosh relates to a method for selecting a most suitable logic channel for transmitting packet data. Ghosh does not disclose transmitting from the base station a first message to a controlling radio network controller allocated to the base station when the measurements show that the transmission quality does not meet a defined criterion, as required by the present invention. Nor does Ghosh disclose that measurements of transmission quality of the common

channel are taken in the subscriber stations for each of the subscriber stations and made available to the base station.

Ghosh does not disclose taking measurements of transmission quality in the subscriber station and making them available in the base station. Rather, Ghosh discloses that a measurement report message includes queue size information and QoS <u>requirements</u> of the packets accumulated at the UE, not information as to the <u>actual</u> QoS and whether the QoS meets those requirements. In other words, transmission quality itself is not measured, contrary to the claimed features. Furthermore, no measurements, whether of transmission quality or otherwise, are made available to the Node B (base station). The measurements are either sent via the Node B in a message to the RNC or they are computed by the Node B itself.

For example, in paragraph [0026] and Fig. 2 of Ghosh, it is stated that the UE (subscriber station) sends a measurement report message to an RNC via a source node B. However, the measurement report message includes queue size information and QoS requirements of the packets accumulated at the UE, not information as to the actual QoS and whether the QoS meets those requirements. This is in contrast to the independent claims, which require that the subscriber station makes channel quality measurements and transmits these measurements to the base station so that they are made available in the base station.

Furthermore, as acknowledged by the Examiner, Ghosh does not teach taking measurements in the subscriber station and making them available to the base station, as required by the claimed features. Still further, Ghosh is silent as to transmitting a message if the measurements show that transmission quality does not meet a first criterion, the message containing information about transmission quality and an identifier of a subscriber station for which measurements indicate that the transmission quality meets a second criterion.

Therefore, one of ordinary skill in the art looking to improve resource location by measuring transmission quality and taking account of how radio conditions for individual subscriber stations appear would not consult Ghosh, since Ghosh is concerned with finding the most suitable channel for transmitting data based on the quality requirements of the data, whereas the independent claims recite measuring the transmission quality of the common channel itself.

Furthermore, the cited prior art reference Jokiaho does not provide any hint or suggestion as to the independent claims.

Jokiaho discloses taking measurements as such, but rather transmits a location updating message from the mobile station to a data service center. This location updating message is not

made available in the base station. The base station adds a cell identifier to the location updating message, which identifies the cell from which the location updating message was received. The location updating message provided with the cell identifier is then transmitted to the data service center. It can be seen from Fig. 1 of Jokiaho that the data service center AGENT 19 is a completely separate entity from the base station and is in fact located in the core network outside of the RAN itself.

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Jokiaho does not disclose taking measurements in the subscriber station of transmission quality and making them available in the base station. Instead, Jokiaho discloses that a subscriber station makes its location information available to a data service center. Furthermore, Jokiaho is silent as to transmitting from the base station a message if measurements show that the transmission quality does not meet a first criterion, the message containing information about transmission quality and an identifier of a subscriber station for which measurements indicate that the transmission quality meets a second criterion. Therefore, Jokiaho does not disclose taking measurements in the subscriber station, let alone measurements of transmission quality or making them available in the base station. Thus one of ordinary skill in the art would find no hint or suggestion in Jokiaho whatsoever as to the subject matter of the claimed invention.

Furthermore, the cited prior art reference Lee does not provide any hint or suggestion as to the independent claims.

Lee relates to a method of updating a radio link parameter. In Lee, it is disclosed that the node B internally measures radio environment or monitors status of user data transmission. If it is the end of an update period or the parameter indicating the state of the radio link exceeds a certain threshold value, the node B initiates updating of the HS-DPCCH related parameter. The node B sends the HSDPA related parameter value that is to be updated to the RNC.

Lee also does not disclose taking measurements in the subscriber station at all, as required by the present invention. All measurements are made by the Node B. Therefore, Lee does not disclose taking measurements in the subscriber station of transmission quality and making them available in the base station. Nor does it disclose transmitting a message if measurements show that the transmission quality does not meet a first criterion, the message containing information about transmission quality and an identifier of a subscriber station for which measurements indicate that the transmission quality meets a second criterion.

It is therefore clear that in Lee it is the node B itself which performs the measurement of the radio environment, not the subscriber station. Again, this is in direct contrast to the independent claims, in which the subscriber station takes transmission quality measurements of

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the common channel and transmits these measurements to the base station so that they are made available in the base station.

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Furthermore, it could not possibly be reasonably expected of one of ordinary skill in the art to search for three documents, and then try to patch them together to arrive at the subject matter of the claimed invention. This means that even to carry out just the first factual enquiry "determining the scope and contents of the prior art" for establishing a background for determining obviousness, as set forth in *Graham v. John Deere Co.*, would require undue effort and skill on the part of the skilled person.

One of ordinary skill in the art would not be motivated to combine these documents since they are all in different fields of endeavour. Ghosh relates to determining the most appropriate channel to transmit on based on received QoS requirements; Jokiaho relates to a location management method for packet data transmission; and Lee relates to updating radio link parameters. Therefore, it cannot be sensibly argued that the skilled person would select these documents if he wished to arrive at the claimed invention.

Kroth does not correct or compensate for the above identified failure of Ghosh, Jokiaho, and Lee to render obvious <u>all</u> the features recited in independent claims 12, 29, and 32-33.

In conclusion, it is respectfully submitted that the combination of Ghosh, Jokiaho, Lee, and Kroth does not teach or make obvious all of the features of the independent claims.

Dependent claims 15-27 and 30-31 are patentable at least by inheriting patentable features from independent claims 12 and 29 from which they depend.

If there are any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

Date:

9-22-11

Respectfully submitted, STAAS & HALSEY LLP

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